



Attorney's Docket No.: 07844-416001 / P380

Pre-Audit 2673  
10-11-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bruce E. Kaskel

Art Unit : 2673

Serial No. : 09/765,957

Examiner : Unknown

Filed : January 19, 2001

Title : APPROXIMATING GRADIENTS WITH OFFSET MIDPOINTS

Commissioner for Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

RECEIVED

Prior to examination, please amend the application as follows:

SEP 20 2002

Technology Center 2600

In the specification:

Replace the paragraph beginning at page 7, line 11 with the following rewritten paragraph:

A1 -- The three values that are computed are, maximum vertical error for point  $x_n$  (304), a speed factor  $a$  (306) and a next "x" value ( $x_{n+1}$ ) (308). The speed factor  $a$  is equal to the error that was calculated for a given iteration minus the tolerance  $T$  divided by the derivative  $d$  where: --

Replace the paragraph beginning at page 7, line 21 with the following rewritten paragraph:

A2 -- Thereafter, a check is made to determine if the absolute value of the speed factor  $a$  is greater than a fixed number (310). In one implementation, the fixed number is a small non-negative number, such as 0.0001. If the absolute value is greater, then a next  $x$  is selected ( $n$  is increased by 1 where  $x_{n+1}$  is selected closer to  $S_i$ ) (312) and the process returns to step 304. Otherwise, the point ( $x_{n+1}$ ,  $x_{n+1}^e$ ) is recorded as the next segment point (314) and  $S_i$  (the prior segment point) is set as  $x_n + 1$ . In one implementation, the next "x" ( $x_{n+1}$ ) is selected in

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I hereby certify under 37CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

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